

SEQUENCE LISTING

- (1) GENERAL INFORMATION
- (i) APPLICANT: Hillman, Jennifer L. Lal, Preeti Tang, Y. Tom

Yue, Henry Corley, Neil C.

- (ii) TITLE OF THE INVENTION: KINESIN LIGHT CHAIN HOMOLOG
- (iii) NUMBER OF SEQUENCES: 3
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Incyte Pharmaceuticals, Inc.
 - (B) STREET: 3174 Porter Dr.
 - (C) CITY: Palo Alto
 - (D) STATE: CA
 - (E) COUNTRY: USA
 - (F) ZIP: 94304
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Diskette
 - (B) COMPUTER: IBM Compatible
 - (C) OPERATING SYSTEM: DOS
 - (D) SOFTWARE: FastSE for Windows Version 2.0
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: To Be As in med
 - (B) FILING DATE: /Filed Herewith
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Billings, Lucy J.
 - (B) REGISTRATION NUMBER / 36,749
 - (C) REFERENCE DOCKET NUMBER: PF \0484 US
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 650-8/55-0555
 - (B) TELEFAX: 650-84/5-4166
 - (2) INFORMATION FOR SEQ ID NO:1:
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 61/9 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (vii) IMMEDATATE SOURCE:
 - (A) LIBRARY: SMCANOT01
 - (B) CLØNE: 2479739
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

55

Met Ser Gly Leu Val Leu Gly Gln Arg Asp Glu Pro Ala Gly His Arg 1 5 10 15

Leu Ser Gln Glu Glu Ile Leu Gly Ser Thr Arg Leu Val Ser Gln Gly 20 25 30

Leu Gly Ala Leu Arg Ser Glu His Gln Ala Val Leu Gln Ser Leu Ser 35 40 45

Gln Thr Ile Glu Cys Leu Gln Gln Gly Gly His Glu Glu Gly Leu Val

60





 His Glu Lys Ala Arg Gln Leu Arg Arg Ser Met Glu Asn Ile Glu Leu 65 Gly Leu Ser Glu Ala Gln Val Met Leu Ala Leu Ala Ser His Leu Ser Thr Val Glu Ser Glu Lys Gln Lys Leu Arg Ala Gln Val Arg Arg Leu 105 Cys Gln Glu Asn Gln Trp Leu Arg Asp Glu Leu Ala Gly Thr Gln Gln 120 Arg Leu Gln Arg Ser Glu Gln Ala Val Ala Gln Leu Glu Glu Glu Lys 135 Lys His Leu Glu Phe Leu Gly Gln Leu Arg Gln Tyr Asp Glu Asp Gly 155 150 His Thr Ser Glu Glu Lys Glu Gly Asp Ala Thr Lys Asp Ser Leu Asp Asp Leu Phe Pro Asn Glu Glu Glu Asp Pro Ser Asn Gly Leu Ser 185 Arg Gly Gln Gly Ala Thr Ala Ala Gln Gln Gly Gly Tyr Glu Ile Pro Ala Arg Leu Arg Thr Leu His Asn Leu Val Ile Gln Tyr Ala Ala Gln 220 215 Gly Arg Tyr Glu Val Ala Val Pro Leu Cys Lys Gln Ala Leu Glu Asp 235 Leu Glu Arg Thr Ser Gly Arg Gly His Pro Asp Val Ala Thr Met Leu 250 Asn Ile Leu Ala Leu Val Tyr Arg Asp Gln Asn Lys Tyr Lys Glu Ala 265 Ala His Leu Leu Asn Asp Ala Leu Ser Ile Arg Glu Ser Thr Leu Gly 280 285 Pro Asp His Pro Ala Val Ala Ala Thr Leu Asn Asn Leu Ala Val Leu 295 300 Tyr Gly Lys Arg Gly Lys Tyr Lys Glu Ala Glu Pro Leu Cys Gln Arg 310 315 Ala Leu Glu Ile Arg Glu Lys Val Leu Gly Thr Asn His Pro Asp Val 325 330 Ala Lys Gln Leu Asn Asn Leu Ala Leu Leu Cys Gln Asn Gln Gly Lys 345 350 Tyr Glu Ala Val Glu Arg Tyr Tyr Gln Arg Ala Leu Ala Ile Tyr Glu 360 355 365 Gly Gln Leu Gly Pro Asp Asn Pro Asn Val Ala Arg Thr Lys Asn Asn 375 380 Leu Ala Ser Cys Tyr Leu Lys Gln Gly Lys Tyr Ala Glu Ala Glu Thr 385 390 395 Leu Tyr Lys Glu Ile Leu Thr Arg Ala His Val Gln Glu Phe Gly Ser 405 410 Val Asp Asp His Lys Pro Ile Trp Met His Ala Glu Glu Arg Glu Glu Met Ser Lys Ser Arg His His Glu Gly Gly Thr Pro Tyr Ala Glu 435 Tyr Gly Gly Trp Tyr Lys Ala Cys Lys Val Ser Ser Pro Thr Val Asn Thr Thr Leu Arg Asn Leu Gly Ala Leu Tyr Arg Arg Gln Gly Lys Leu 465 470 475 Glu Ala Ala Glu Thr Leu Glu Glu Cys Ala Leu Arg Ser Arg Arg Gln 485 Gly Thr Asp Pro Ile Ser Gln Thr Lys Val Ala Glu Leu Leu Gly Glu 500 505 510 Ser Asp Gly Arg Arg Thr Ser Gln Glu Gly Pro Gly Asp Ser Val Lys Phe Glu Gly Gly Glu Asp Ala Ser Val Ala Val Glu Trp Ser Gly Asp 530 535 Gly Ser Gly Thr Leu Gln Arg Ser Gly Ser Leu Gly Lys Ile Arg Asp 545 Val Leu Arg Arg Ser Ser Glu Leu Leu Val Arg Lys Leu Gln Gly Thr 565 570 Glu Pro Arg Pro Ser Ser Ser Asn Met Lys Arg Ala Ala Ser Leu Asn 585 Tyr Leu Asn Gln Pro Ser Ala Ala Pro Leu Gln Val Ser Arg Gly Leu





605

595 600 Ser Ala Ser Thr Met Asp Leu Ser Ser Ser Ser 610 615

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 2453 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(vii) IMMEDIATE SOURCE:

- (A) LIBRARY: SMCANOT01
- (B) CLONE: 2479739

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

	GTGAAGTGGT	++	GTGGGAACGC	TGGACTTCTG	GACTTTGGGC	AGGGCAGATC	60
	CTCTGACTCT	CTGGCTGCAG	AACAGTTTCT	TCCGTGCTCT	GGCCTGAGTG	CCCACAGGCC	120
	AGGGGCCTCT	00101011011	CAGACCGGGC	AAGGTCCCCC	AGGCCAGGAT	GTCAGGCCTG	180
	GTGTTGGGGC		GCCTGCAGGC	CACCGGCTCA	GCCAAGAGGA	GATCCTGGGG	240
	AGCACACGGC	TGGTCAGCCA	AGGGCTAGAG	GCCCTACGCA	GTGAACACCA	GGCCGTGCTG	300
	CAAAGCCTGT		TGAGTGTCTG	CAGCAGGGAG	GCCATGAGGA	AGGGCTGGTG	360
	CATGAGAAGG	CCCGGCAGCT	TCGCCGTTCT	ATGGAAAACA	TTGAGCTCGG	GCTGAGTGAG	420
	GCCCAGGTGA	TGCTGGCTCT	AGCCAGCCAC	CTGAGCACAG	TGGAGTCGGA	GAAACAGAAG	480
	CTGCGGGCTC	AGGTGCGGCG	GCTATGCCAG	GAGAACCAGT	GGCTGCGGGA	TGAGCTGGCT	540
	GGCACCCAGC	AGCGGCTACA	GCGCAGTGAA	CAGGCTGTGG	CTCAGCTGGA	GGAGGAAAAG	600
	AAGCACCTGG	AGTTCCTGGG	GCAGCTGCGG	CAGTATGATG	AGGATGGACA	TACCTCGGAG	660
	GAGAAAGAAG	GCGATGCCAC	CAAGGATTCC	CTGGATGACC	TCTTTCCTAA	TGAGGAGGAA	720
	GAGGACCCCA	GCAATGGCTT	GTCCCGTGGT	CAAGGTGCTA	CAGCAGCTCA	GCAGGGTGGA	780
	TATGAGATCC	CAGCAAGGTT	GCGGACGTTG	CACAACCTGG	TGATCCAGTA	CGCAGCCCAA	840
	GGTCGCTATG	AGGTGGCCGT	GCCACTCTGT	AAGCAGGCAC	TAGAGGACCT	GGAGCGCACA	900
	TCAGGCCGTG	GCCACCCTGA	TGTCGCCACC	ATGCTCAACA	TCCTTGCTTT	GGTGTATCGT	960
	GACCAGAATA	AGTATAAGGA	AGCTGCCCAC	CTGCTGAATG	ATGCCCTTAG	CATCCGGGAG	1020
	AGCACCTTGG	GACCTGACCA	TCCTGCTGTG	GCTGCCACAC	TCAACAATTT	GGCTGTGCTC	1080
	TATGGCAAAA	GGGGCAAGTA	CAAGGAGGCA	GAGCCTCTGT	GCCAGCGGGC	ACTGGAGATT	1140
	CGAGAAAAGG	TCCTGGGCAC	GAATCATCCA	GATGTGGCAA	AACAGCTGAA	CAACCTGGCC	1200
	CTCTTGTGCC	AAAACCAGGG	CAAGTATGAG	GCCGTGGAAC	GCTACTACCA	GCGAGCACTG	1260
	GCCATCTACG	AGGGGCAGCT	GGGGCCGGAC	AACCCTAATG	TAGCCCGGAC	CAAGAACAAC	1320
	CTGGCTTCCT	GTTACCTGAA	ACAGGGCAAA	TATGCTGAGG	CTGAGACACT	ATACAAAGAG	1380
	ATCCTGACCC	GTGCCCATGT	ACAGGAGTTT	GGGTCTGTGG	ATGATGACCA	CAAGCCCATC	1440
	TGGATGCATG	CAGAGGAGCG	GGAGGAAATG	AGCAAAAGCC	GGCACCATGA	GGGTGGGACA	1500
	CCCTATGCTG	AGTATGGAGG	CTGGTACAAG			CACAGTGAAC	1560
	ACTACTCTGA	GAAACCTGGG	AGCTCTGTAT				1620
	ACCCTGGAGG	AATGTGCCCT	GCGGTCCCGG			CAGCCAGACG	1680
	AAGGTGGCAG	AGCTGCTTGG		GGTAGAAGGA		GGGCCCTGGA	1740
	GACAGTGTGA	AATTCGAGGG				GTCCGGGGAT	1800
	GGCAGTGGGA	CCCTGCAGAG				GCTCCGCAGA	1860
	AGCAGTGAAC	TCTTGGTGAG	GAAGCTCCAG			CAGCAGCAAC	1920
	ATGAAGCGAG	CAGCCTCCTT	GAACTATCTG				1980
	TCCCGGGGCC	TCAGTGCCAG					2040
	CCCCCAGGTC	TGCTGGGTCC	CCCCACCCC				2100
	GGCTCTTCCC	CACCCTAGG		AAGGGGAGCA			2160
	CTGCCCTTAG	GGTCTCAGCT		GAATCCCTCT			2220
1	CCCTCTCTGC	ACCCTGTGGT			GAGGCCCCAA		2280
	AAGCAGGTAT					AGGGTTGGGG	2340
١	GCTGGCCAGC					CTGTCTCACT	2400
	TCAGGTCCAT		TTTCTTAAAT			NNG	2453
						*1110	2477

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 569 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear





(vii) IMMEDIATE SOURCE:

(A) LIBRARY: GenBank

(B) CLONE: 307085

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Met 1	Ser	Thr	Met	Val	Tyr	Ile	Lys	Glu	Asp	Lys	Leu	Glu	Lys	Leu 15	Thr
Gln	Asp	Glu	ı Ile 20	Ile	Ser	Lys	Thr	Lys 25	Gln	Val	Ile	Gln	Gly 30		Glu
Ala	Leu	Lys 35	Asn	Glu	His	Asn	Ser 40	Ile	Leu	Gln	Ser	Leu 45		Glu	Thr
Leu	Lys 50	Cys	Leu	Lys	Lys	Asp 55	Asp	Glu	Ser	Asn	Leu 60		Glu	Glu	Lys
Ser 65	Asn	Met	Ile	Arg	Lys 70	Ser	Leu	Glu	Met	Leu 75	Glu	Leu	Gly	Leu	Ser 80
Glu	Ala	Gln	Val	Met 85	Met	Ala	Leu	Ser	Asn 90	His	Leu	Asn	Ala	Val 95	Glu
Ser	Glu	Lys	Gln 100	Lys	Leu	Arg	Ala	Gln 105	Val	Arg	Arg	Leu	Cys 110		Glu
		115					120					125	_		Gln
	130					135	•				140				Leu
145					150					155					Ser 160
				165				Lys	170					175	
			180					185					190		Ser
		195					200					205			Arg
	210					215					220			_	Arg
225					230			Lys		235			_		240
				245				Asp	250	Ala	Thr	Met	Leu	Asn 255	
			260					Asn 265					270		
		275					280	Arg	Glu	Lys	Thr	Leu 285			_
	290					295	Leu	Asn	Asn	Leu	Ala 300			_	_
305					310			Glu		315					320
				325				Lys	330					335	_
			340					Cys 345					350		
		355					360	Ala				365			-
	370					375		Ala			380				
385					390			Phe		395					400
				405				Glu	410			_		415	~
			420					His 425					430		_
		435					440	Ser				445			
	450					455		Pro			460				_
465					470			Gln		475					480
rnr	ьeu	GLU	GLu	Ala	Ala	Met	Arg	Ser	Arg	Lys	Gln	Gly	Leu	Asp	Asn





Val His Lys Gln Arg Val Ala Glu Val Leu Asn Asp Pro Glu Asn Met Glu Lys Arg Arg Ser Arg Glu Ser Leu Asn Val Asp Val Lys Tyr Glu Ser Gly Pro Asp Gly Gly Glu Glu Val Ser Met Ser Val Glu Trp Asn Gly Gly Val Ser Gly Arg Ala Ser Phe Cys Gly Lys Arg Gln Gln Gln Gln Trp Pro Gly Arg Arg His Arg